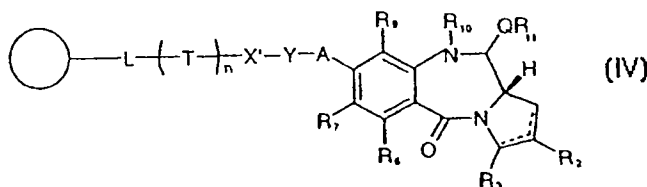




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification<sup>7</sup>: C07D 487/04, C07B 61/00, C07D 519/00, A61K 31/5517, G01N 33/50 // (C07D 487/04, 243:00, 209:00) (C07D 519/00, 487:00, 487:00)</p>	A3	<p>(11) International Publication Number: <b>WO 00/12506</b></p> <p>(43) International Publication Date: 9 March 2000 (09.03.00)</p>
<p>(21) International Application Number: PCT/GB99/02836</p> <p>(22) International Filing Date: 27 August 1999 (27.08.99)</p> <p>(30) Priority Data: 9818730.5 27 August 1998 (27.08.98) GB</p> <p>(71) Applicant (for all designated States except US): THE UNIVERSITY OF PORTSMOUTH HIGHER EDUCATION CORPORATION [GB/GB]; University House, Winston Churchill Avenue, Portsmouth PO1 2UP (GB).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): THURSTON, David, Edwin [GB/GB]; University of Portsmouth, St Michael's Building, White Swan Road, Portsmouth, Hampshire PO1 2UP (GB). HOWARD, Philip, Wilson [GB/GB]; University of Portsmouth, St Michael's Building, White Swan Road, Portsmouth, Hampshire PO1 2DT (GB).</p> <p>(74) Agents: WATSON, Robert, J. et al.; Mewburn Ellis, York House, 23 Kingsway, London WC2B 6HP (GB).</p>		<p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p><b>Published</b> With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</p> <p>(88) Date of publication of the international search report: 29 June 2000 (29.06.00)</p>

(54) Title: COLLECTIONS OF COMPOUNDS



## (57) Abstract

A compound of formula (IV): O is a solid support; L is a linking group or a single bond; X' is selected from CO, NH, S, or O; A is O, S, NH, or a single bond; R<sub>2</sub> and R<sub>3</sub> are independently selected from: H, R, OH, OR, =O, =CH-R, =CH<sub>2</sub>, CH<sub>2</sub>-CO<sub>2</sub>R, CH<sub>2</sub>-CO<sub>2</sub>H, CH<sub>2</sub>-SO<sub>2</sub>R, O-SO<sub>2</sub>R, CO<sub>2</sub>R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3; R<sub>6</sub>, R<sub>7</sub>, and R<sub>9</sub> are independently selected from H, R, OH, OR, halo, nitro, amino, Me<sub>3</sub>Sn; R<sub>11</sub> is either H or R; Q is S, O or NH; R<sub>10</sub> is a nitrogen protecting group; and Y is a divalent group such that HY = R, and other related compounds and collections of compounds.

*FOR THE PURPOSES OF INFORMATION ONLY*

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece			TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	NZ	New Zealand		
CM	Cameroon			PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakhstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		

# INTERNATIONAL SEARCH REPORT

national Application No

PCT/GB 99/02836

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07D487/04 C07B61/00 C07D519/00 A61K31/5517 G01N33/50  
 //(C07D487/04,243:00,209:00),(C07D519/00,487:00,487:00)

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category <sup>2</sup>	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	D.E, THURSTON ET AL.: "Synthesis of a novel GC-specific covalent-binding DNA affinity-cleavage agent based on pyrrolobenzodiazepines" CHEMICAL COMMUNICATIONS.,1996, pages 563-565, XP002135907 ROYAL SOCIETY OF CHEMISTRY., GB ISSN: 1359-7345 scheme 1	13
A	WO 97 01560 A (PHARMACOEPIA INC) 16 January 1997 (1997-01-16) claim 1	13

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"Z" document member of the same patent family

Date of the actual completion of the international search

17 April 2000

Date of mailing of the international search report

08/05/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl.  
 Fax: (+31-70) 340-3016

Authorized officer

Alfaro Faus, I

# INTERNATIONAL SEARCH REPORT

national Application No  
PCT/GB 99/02836

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CHEMICAL ABSTRACTS, vol. 125, no. 23, 1996 Columbus, Ohio, US; abstract no. 300965y, B. YINGZHI ET AL: "Building blocks for peptide and carbamate libraries" page 1013; XP002135908 abstract & BIOORG. MED. CHEM. LETT. , vol. 6, no. 19, 1996, pages 2299-2300, ----	13
P,X	BARALDI P G ET AL: "Design, synthesis and biological activity of a pyrrolo '2,1-c!'1,4!benzodiazepine (PBD)-distamycin hybrid" BIOORGANIC & MEDICINAL CHEMISTRY LETTERS,GB,OXFORD, vol. 8, no. 21, 3 November 1998 (1998-11-03), pages 3019-3024, XP004141867 ISSN: 0960-894X compound 10 -----	1

# INTERNATIONAL SEARCH REPORT

Information on patent family members

national Application No

PCT/GB 99/02836

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9701560 A	16-01-1997	AU 5831898 A	21-05-1998
		AU 6402096 A	30-01-1997
		CA 2225914 A	16-01-1997
		EP 0850238 A	01-07-1998
		JP 11508563 T	27-07-1999
		US 5962337 A	05-10-1999
<hr/>			